SUPPORT FOR THE AMENDMENT

Support for claim 6 is found on page 3, line 9 and page 4, line 12 of the specification. Support for claims 7 and 8 is found on page 4, lines 8-21 of the specification. Support for claim 9 is found on page 4, lines 22-24 of the specification. Support for claims 10 and 11 is found on page 5, lines 6-9 of the specification. Support for claims 12-13 is found on page 7, lines 3-6 of the specification. Support for claims 14-15 is found on page 7, lines 6-9 of the specification. Support for claim 16 is found on page 8, lines 11-14 of the specification. Support for claim 17 is found on page 9, lines 21-24 of the specification. Support for claim 18 is found on page 10, lines 13-15 of the specification. Support for claims 19-20 is found beginning on page 10, line 23 through page 11, line 1 of the specification. No new matter would be added to this application by entry of this amendment.

Upon entry of this amendment, claims 1-20 will now be active in this application.

REQUEST FOR RECONSIDERATION

The claimed invention is directed to an aqueous hair cleansing composition.

Applicants wish to thank examiner Channavajjala for the helpful and courteous discussion held with their U.S. representative on May 30, 2007. At that time, applicants' U.S. representative argued the failure of the cited references to disclose or suggest an improved foaming performance by selection of the sulfate alkoxylation distribution as claimed. The following is intended to expand upon the discussion with the examiner.

Aqueous hair cleansing compositions based on alkyl sulfate surfactants have been used based on their high detergency and foaming volume. While alkyl sulfate surfactants have some drawbacks in terms of causing hair friction, polyoxyethylene alkyl surfactants have become popular based upon good feel but typically exhibit reduced foaming properties. Accordingly, alkyl ether surfactants having good foaming properties are sought.

The claimed invention addresses the problem by providing a hair cleansing composition comprising an alkyl ether sulfate surfactant comprising 30-45 wt.% of the sulfate of formula 1 where n=0, 18-27 wt.% of the sulfate where n=1, and 10-20 wt.% of the sulfate where n=2, the balance where n is 3 or greater and the sum of sulfates where n=0-2 is 70 wt.% or greater. Applicants have discovered that such a distribution of alkyl ether sulfate surfactants provides for good foaming properties.

As evidence of the improved foaming speed and lubricity resulting from the claimed invention, the examiner's attention is directed to the data appearing in Table 2, page 18 of the specification. For the examiner's convenience, a portion of the data is reproduced below.

Table 2

Component (wt.%)	Examples								Comparative Examples			
	1	2	3	4	5	6	7	8	1	2	3	4
Sulfate 1	10	15			10	12						
Sulfate 2			10	8								
Sulfate 3							12	15				
Comparative Sulfate 1									15			
Comparative Sulfate 2										10		
Comparative Sulfate 3											15	12
Laurylamidopropyl betaine				2							2	
Myristyl alcohol	1	1	1		1	1	1	1	1	1		1
Ethyelne glycol distearate			2	2	2	3	3	3		2	2	3
Distearyl ether		2							2			
Behenyl alcohol	2		2		2					2		
Cationic hydroxyethyl cellulose	0.5		0.3		0.3	0.2	0.2	0.3		0.3		0.2
Cationic guar gum		0.5	0.2	0.5	0.2	0.3	0.3		0.5	0.2	0.5	0.3
Amino-modified silicone						0.1	0.1					0.1
Dimethicone (gum viscosity: 8 million mm2/s, average particle size; 0.5 μm)						1.2	1.2	0.5				1.2
Malic acid	0.75	0.75	0.75	0.75	0.03	0.75	0.75	0.75	0.75	0.03	0.75	0.75
Sodium chloride						0.2						0.2
Purified water	Balance	Balance	Balance	Balance	Balance	Balance	Balance	Balance	Balance	Balance	Balance	Balance
pH (when diluted to 20 times the weight with water, 25°C)	3.7	3.7	3.7	3.7	5.5	3.7	3.7	3.7	3.7	5.5	3.7	3.7
Foaming speed	A	A	A	A	A	A	A	A	B	B	D	D
Lubricity of foam	18	18	20	18	19	20	20	19	15	9	7	10
Luster and manageability	19	20	20	18	15	20	20	20	18	6	18	18

None of Comparative Examples 1-4 using comparative sulfates 1-3 meet the claim limitation of 30-45 wt.% of n=0, 18-27 wt.% of n=1, 10-20 wt.% of n=2 and 70 wt.% or greater of n=0-2. Comparative sulfates 1 and 2 have an amount of n=0 sulfate **in excess of** the claim limit of 45 wt.% and all had an amount of n=0-2 sulfate **less than 70 wt.%.** In each of these examples, the foaming speed was **not less than 100 seconds**.

In contrast, examples 1-8 using sulfates 1-3 in which the amount of n=0 sulfate is within the claimed range of 30-45 wt.% and the amount of n=1 sulfate is within the claimed range of 18-27 wt.% and the amount of n=2 sulfate is within the claimed range of 10-20 wt.% and the amount of n=0-2 sulfate exceeded 70 wt.% all had a foaming speed of **less than 100 seconds**. Furthermore, the foams were judged at a high assessment of lubricity and luster and manageability. Thus, by selection of the distribution of the ethoxylation of an alkyl ether sulfate, applicants are able to obtain good lubricity as well as high foaming speed. Such a result in a hair cleansing composition is nowhere suggested in the cited prior art of record.

The rejections of claims 1-5 under 35 U.S.C. § 102(b) over EP 190,010 (EP '010) and under 35 U.S.C. § 103(a) over U.S. 6,914,038 in view of EP '010 are respectfully traversed.

None of the cited prior art of record discloses or suggests the claim limitation of 30-45 wt.% of n=0 sulfate, 18-27 wt.% of n=1 sulfate, and 10-20 wt.% of n=2 sulfate wherein at least 70% of all sulfates are n=0-2.

EP '010 merely describes a shampoo composition comprising a synthetic anionic surfactant of an alkyl ether sulfate or an ethylene oxide extended alkyl ether sulfate where the number of ethylene oxide units range from 1-10 (page 3, lines 20-24). Preferred compositions have an average degree of epoxylation of from about 1-4 (page

4, lines 7-8) and specific examples contain 3-30 wt.% of sulfates where n=0, 45-90 wt.% of sulfates where n=1-4, 10-25 wt.% of sulfates where n=4-8 and 0.1-15 wt.% of sulfates where n is greater than 8. The reference is deficient in suggesting the specific limitations of 18-27 wt.% of sulfates where n=1 and 10-20 wt.% of sulfates where n=2 as the reference fails to distinguish between sulfates where n=1-4. In view of the generic disclosure of sulfates where n=1-4, the reference fails to disclose or suggest cpplicants' specific amounts of sulfate where n=1 and n=2.

Terazaki et al. describes a hair cleansing composition comprising alkyl sulfates and polyoxyethylene alkyl ether sulfates of formulas (1) and (2) where m ranges from 1-5 (column 2, lines 10-20). The reference makes no more distinction in terms of the distribution of ethylene oxide units other than m ranging from 1-5 and accordingly cannot disclose or suggest specific amounts of 18-27 wt.% of sulfate where n=1 and 10-20 wt.% of sulfate where n=2 and wherein at least 70 wt.% of the sulfates are n=0-2.

As the references fail to disclose or suggest the claim limitations of 18-27 wt.% of sulfates where n=1 and 10-20 wt.% of sulfates where n=2 and at least 70 wt.% of all sulfates being n=0-2, the claimed invention is clearly neither anticipated nor rendered obvious from the references alone or in combination. Accordingly, withdrawal of the rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) is respectfully requested.

Moreover, applicants have already provided the evidence of an unexpected improvement in foaming speed through selection of a polyoxyethylene alkyl ether sulfate distribution as claimed.

The rejection of claims 1-5 for non-statutory obviousness-type double patenting over claims 1-17 of U.S. 6,914,038 in view of EP '010 is respectfully traversed.

U.S. '038 fails to claim an aqueous hair cleansing composition comprising 18-27 wt.% of sulfates where n=1, 10-20 wt.% of sulfates where n=2, and at least 70 wt.% of all sulfates where n=0-2. None of claims 1-17 of U.S. '038 in any way describe the claimed distribution of ethylene oxides in an ethylene oxide alkyl ether sulfate, but rather merely describes in claim 1 "an anionic surfactant having a sulfate group." As there is no such suggestion of the claimed sulfate distribution in any of claims 1-7 of this reference, withdrawal of the ground of non-statutory obviousness-type double patenting is respectfully requested. While the examiner cites to EP '010 as evidence that an anionic surfactant having a sulfate group may include the surfactant of EP '010, EP '010 fails to provide sufficient clarity of the claim limitation of 18-27 wt.% of sulfate where n=1 and 10-20 wt.% of sulfate where n=2 and at least 70 wt.% of sulfate where n=0-2 such that a rejection for non-statutory obviousness-type double patenting is believed to be improper and should be withdrawn.

Applicants respectfully submit that the provisional rejection of claims 1-5 for non-statutory obviousness-type double patenting over claims 1-7 of co-pending application 11/313,740 be held abeyance until which time allowable subject matter is indicated. Applicants note that U.S. 11/313,740 was filed on December 2, 2005, nearly two years after Applicants' U.S. filing date of December 9, 2003. As such, the above-identified application is **the first filed application** wherein U.S. 11/313,740 is **the second filed application** such that upon indication of allowable subject matter, and the provisional non-statutory obviousness-type double patenting rejection over U.S. '740 being the only ground of rejection, the examiner is encouraged to pass the above-identified application to issue in favor of any issues for obviousness-type double patenting being addressed in the later application of U.S. '740. MPEP 804 I.B.1.

While the Examiner has identified the use of the trademark Kalcol 2470 which appears on page 13 of applicants' specification, applicants note that **this material is identified as a trade name product** of Kao Corporation as being a dodecyl alcohol: tetradecyl alcohol mixture in about a 3:1 ratio. This use **identifies the source of the goods** as well as the appropriate generic terminology. Such use is respectful of the trade name insofar as it identifies the very source of the material and such use would not adversely effect the validity of any trademark therein as the source of the goods are identified. As trademarks are a means of tying goods with a source, applicants' use of the trademark Kalcol 2470 does not adversely effect the recognition of the relationship of this material with the Kao Corporation. Accordingly no change is believed to be necessary to the specification.

Applicants submit this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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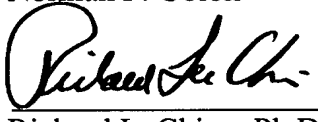
Norman F. Oblon



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